REMARKS BY EDWARD D. COPE, AT MEETING MAY 6TH, 1870.

Prof. E. D. Cope exhibited the nearly perfect cranium of a Dicynodont Reptile from the Cape Colony, South Africa, which he regarded as different from those described by Owen and Huxley.

The application of the cutting edges of the mandible to those of the upper jaw, was nearly horizontal instead of vertical, as in some marine Chelonia, on which account he regarded it as representing a genus distinct from Ptychognathus, with which it was otherwise identical. This was named Lystrosaurus.

It was nearest the Ptychognathus latifrons, Owen, but differed in baving narrowed, sublongitudinal orbits, with immense protuberances in front of them, a very narrow front anterior to, or below these, with two parallel wide sulci on each side, and a much wider occiput and interorbital region. The middle of the cutting margin of the premaxillary was prolonged into a short beak. The front from the orbital protuberances, and the direction of the tusks, both nearly vertical. The following measurements are given:

		In.	Lines.
Lei	ngth cranium (greatest),	ř	9
Wi	idth occiput,	8	
- 4	' intertemporal space,	1	10.5
6	' interorbital	9	ĩ
61	' between supraorbital protuberances,	4	8
61	anterior to orbits,	2	3
6.1	' across middle of alveolæ of tusks,	3	
6.	" internasal space,	1	8
•	' 'temporal fossa,	3	1.5
Length of "		2	1.5
• •	from hindmost part of skull to orbit,	3	3
6.6	from fore part of orbit to border of premaxillar;	y, 4	9
Long diameter of orbit,			3
• (" nostril,		11
• •	" nostril,		11

The species was named *Lystrosaurus frontosus*. The specimen belonged to the private collection of Dr. E. R. Beadle of this city.

Portions of several large teeth or tusks enclosed in the Triassic shales and sandstones of Phœnixville, Pa., were exhibited, probably belonging to Dicynodont reptiles. They represented specimens of much larger size than that of the L. frontosus.